Claims:

1. A method of preparing an end of an optical cable, comprising:

exposing a length of inner tubing extending from cable armor located at the cable end;

exposing a length of one or more optical waveguides extending from the inner tubing;

securing the cable armor to the inner tubing;

feeding the optical waveguides through protective tubing of a retention assembly, wherein a portion of the protective tubing extends from an end of the retention assembly surrounded by mating armor;

securing the mating armor of the retention assembly to the inner tubing; and

filling at least a portion of the retention assembly with an adhesive, thereby securing a portion of the optical waveguides to the retention assembly.

2. The method of claim 1, wherein securing the cable armor to the inner tubing comprises crimping a portion of the cable armor that coaxially surrounds the inner tubing to the inner tubing.

3. The method of claim 1, wherein securing the mating armor of the retention assembly to the inner tubing comprises crimping a portion of the mating armor that coaxially surrounds the inner tubing to the inner tubing.

4. The method of claim 1, wherein feeding the optical waveguides through the protective tubing positions a portion of the protective tubing into a portion of the optical cable.

5. A method of preparing an end of an optical cable, comprising:

providing the end of the optical cable having at least one optical waveguide extending from the end; and

filling at least a portion of a fiber retention subassembly coupled to the optical cable with an adhesive, thereby fixing a portion of the optical waveguide within the fiber retention subassembly.

6. The method of claim 5, further comprising curing the adhesive within the fiber retention subassembly with an ultra violet lamp.

7. The method of claim 5, wherein filling at least a portion of the fiber retention subassembly comprises injecting an adhesive into a fill port disposed along the length of the fiber retention subassembly.

8. A method of preparing an end of an optical cable, comprising:

providing the end of the optical cable having at least one optical waveguide extending from the end;

feeding the optical waveguides through protective tubing of a retention assembly, wherein a portion of the protective tubing extends from an end of the retention assembly surrounded by mating armor and positions within a portion of the optical cable; and

securing the mating armor of the retention assembly to inner tubing of the optical cable.

9. The method of claim 8, wherein securing the mating armor of the retention assembly to the inner tubing comprises crimping a portion of the mating armor that coaxially surrounds the inner tubing to the inner tubing.

10. The method of claim 8, further comprising securing the cable armor to the inner tubing.

11. A method for forming a cable splice, comprising:

providing a first optical waveguide extending from an end of an optical cable and a second optical waveguide extending from a member;

fixing the first optical waveguide within a fiber retention subassembly coupled to a portion of the optical cable;

fusing the first and second optical waveguides to form a splice; and

preventing relative movement between the optical cable and the member at the splice by tightening a compression fitting of a splice cover to the optical cable, wherein the splice cover comprises a tube that covers the splice and secures to the member.

12. The method of claim 11, wherein fixing the first optical waveguide comprises filling at least a portion of the fiber retention subassembly with an adhesive.

13. The method of claim 11, wherein the member is another optical cable.

14. The method of claim 11, wherein the member is a sensing device.

15. A fiber retention subassembly for use on an end of an optical cable, comprising:

a section of armor;

a fill tube coupled to the armor, wherein the armor extends from an end of the fill tube to provide a mating end to couple with a corresponding mating end of a prepared cable end; and

a protective tube coupled to the end of the fill tube, the protective tube having an outer diameter sized to position inside a portion of the optical cable.

16. The fiber retention subassembly of claim 15, wherein the armor, the fill tube and the protective tube are coupled together concentrically by a crimp in the armor.

17. The fiber retention subassembly of claim 15, wherein the fill tube comprises a polymer that is at least translucent.

18. A splice cover for securing an end of an optical cable to a member, comprising:

a compression fitting securable to an outer surface of the optical cable; and

a tube coupled to the compression fitting and having a length that extends to the member, the tube securable to the member to surround a splice in an optical waveguide.

19. The splice cover of claim 18, wherein the compression fitting provides a seal at the outer surface of the optical cable.

20. The splice cover of claim 18, wherein the splice cover prevents relative movement between the optical cable and the member at the splice.

21. The splice cover of claim 18, wherein the member is another optical cable that the tube is coupled to by another compression fitting.

22. The splice cover of claim 18, wherein the member is a sensing device that the tube is welded to.